

Amendments to the Claims

The following listing of claims replaces all prior versions of listings.

Listing of Claims:

1. (Currently Amended) A hollow fiber membrane for blood purification obtained by running a raw spinning solution comprising polysulfone-based resin, polyvinylpyrrolidone K90, and dimethyl acetamide, through an air gap whose relative humidity is 75% to 90% for 0.4 seconds or more, the hollow fiber membrane having an integrally continuous structure from the inner membrane surface to the outer membrane surface and comprising a hydrophobic polymer and a hydrophilic polymer, having a polyvinylpyrrolidone concentration in the hollow fiber membrane of between 3.0 and 5.0 wt% and

exhibiting a zeta potential on the inner surface thereof of greater than -3.0 mV but less than 0 mV at pH 7.5, when measured using a sample with an embedded resin on the outer side for allowing the electrolyte solution to flow through only the inside of the hollow fiber, and using a 0.001 mol/l potassium chloride aqueous solution as an electrolyte solution.

2. (Currently Amended) The follow fiber membrane for blood purification according to Claim 1, further comprising exhibiting:

- (a) a polyvinyl pyrrolidone sieving coefficient of 45% or more in a filtration test using a polyvinyl pyrrolidone aqueous solution with a weight average molecular weight of 40,000,
- (b) an albumin sieving coefficient of 0.6% or less in a filtrate test using bovine serum,
- (c) a protein adsorption amount of 65 mg/m² or less,
- (d) a breaking strength of 60 kg/cm² or more, and
- (e) a breaking elongation of 60% or more.

3.-5. (Canceled)

6. (Currently Amended) The hollow fiber membrane for blood purification according to Claim 1, wherein an ever overall mass transfer coefficient of phosphorous is 0.040 cm/mm cm/min or greater.

7. (Currently Amended) The hollow fiber membrane for blood purification according to claim 1, further comprising: (g) a thickness of a dense layer between 1 and 5 μm .

8. (Previously Presented) A blood purification apparatus comprising the hollow fiber membrane according to claim 1, installed in a cylindrical container having two nozzles for flowing a dialysate, the cylindrical container having both ends fabricated with a potting material for separating the hollow inside of the membrane from the outside by a membrane wall and the cylindrical container further having a header cap for flowing blood fitted on both ends.

9. (Previously Presented) The blood purification apparatus according to claim 8, wherein the hollow fiber membrane has a phosphorus clearance of at least 180 ml/min per a membrane area of 1.5 m^2 .

10.-20. (Canceled)